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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,988	10/22/2001	Yoshiyuki Maki	2018-460	7816
23117	7590	07/15/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			BROADHEAD, BRIAN J	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Interview Summary</b>	<b>Application No.</b> 09/982,988	<b>Applicant(s)</b> MAKI ET AL.	
	<b>Examiner</b> Brian J. Broadhead	<b>Art Unit</b> 3661	

All participants (applicant, applicant's representative, PTO personnel):

(1) Brian J. Broadhead.

(3)\_\_\_\_\_.

(2) Raymond Y. Mah.

(4)\_\_\_\_\_.

Date of Interview: 11 July 2005.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1-34, proposed claim 35.

Identification of prior art discussed: Schofield et al., 6294989.

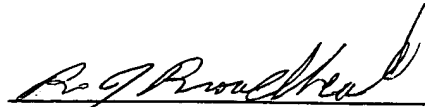
Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant's representative presented arguments on the interpretation of the word malfunction and that even with a tire pressure outside the desired range the tire would still be usable. The examiner stated that his position was that a malfunction would include being outside the desired operating range and that a malfunction doesn't necessarily mean a complete failure has occurred. An example was provided of one cylinder not operating properly of a multi-cylinder engine. The engine would have a malfunction, but would still be capable of operating. The draft claim presented was discussed and the examiner stated that currently cited prior art did not appear to disclose all the limitations. The examiner will fully consider the draft claim when the claim is formally presented.

**Applicant Initiated Interview Request Form**

Application No. 09/982,988 First Named Applicant: MAKI  
 Examiner: Broadhead, B. Art Unit: 3661 Status of Application: Pending

**Tentative Participants:**

(1) Raymond Y. Mah (2) \_\_\_\_\_  
 (3) Ex. B. Broadhead (4) \_\_\_\_\_

Proposed date of Interview: July 11, 2005 Proposed Time: 2:00 PM (AM/PM)

**Type of Interview Requested:**

(1) ☒ Telephonic OR (2) ☒ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☒ NO

If yes, provide brief description: \_\_\_\_\_

**Issues To Be Discussed**

Issues (Rej., Obj., etc.)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>Rejection 35 U.S.C. §103</u>	<u>1-34</u>	<u>Shimizu et al (EP '423), Schofield et al (U.S. '989)</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(2) <u>New claim 35</u>	<u>35</u>	<u>Shimizu et al (EP '423), Schofield et al (U.S. '989)</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Continuation Sheet Attached

**Brief Description of Arguments to be Presented:**

Please see attached sheet

An interview was conducted on the above-identified application on 7/11/05

**NOTE:**

This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01). This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, application is advised to file a statement of the substance of this interview (37 C.F.R. § 1.133(b)) as soon as possible.

[Signature]  
 Applicant/Applicant's Representative Signature)

[Signature]  
 (Examiner/SPE Signature)

This collection of information is required by 37 C.F.R. § 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. § 122 and 37 C.F.R. § 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and selection option 2.

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**Attachment to Interview Request Form**

Claims 1-34 were rejected under 35 U.S.C.103(a) as being unpatentable over Shimizu et al, (EP '423, hereinafter "Shimizu") in view of Schofield et al (U.S. '989, hereinafter "Schofield").

Independent claim 1 (independent claims 7, 10, 11, 14, 20, 23 and 24 are similar) recites that operation of said at least one MIL is selected from one of lighting-on, flashing and lighting-off based on a result of a malfunction detection operation of each one of said at least one diagnosis target (see lines 4-6 of claim 1). Schofield teaches three tire pressure levels (i.e., below, at, or above the desired tire pressure) and the indication of a current one of the three tire pressure levels by one of lighting-on, flashing and lighting-off. However, the tire pressure below or above the desired tire pressure simply indicates the state of the tire, and cannot be considered as an indication of a malfunction of the tire.

For example, even when the measured tire pressure is below the desired tire pressure level and is thus in an "abnormal" state, the tire may still function properly at a relatively low traveling speed (e.g., 20 MPH) of the vehicle without causing a malfunction, such as a phenomenon known as "Standing Wave". The standing wave of the tire and the consequent tire bursting normally require the high traveling speed of the vehicle in addition to the low tire pressure. Therefore, the indication of the tire pressure below the desired tire pressure level may be used to provide a possible advance warning to a vehicle driver before occurrence of the

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malfunction (e.g., the standing wave and the bursting) of the tire but cannot be solely used as the indication of the malfunction of the tire.

New claim 35 (provided below) recites that a relationship between said malfunction information and said selected condition of one of said plurality of malfunction-information storing objects is different from that of another one of said plurality of malfunction-information storing objects. This feature of claim 35 is supported by, for example, FIG. 5. For example, in the first malfunction-information storing object 310, the temporarily abnormal is paired with "OFF" of the MIL. In the second malfunction-information storing object 320, the temporarily abnormal is paired with "ON" of the MIL. Thus, the relation between the malfunction information and the selected condition of the first-malfunction information storing object 310 is different from that of the second-malfunction information storing object 320.

Since Schofield fails to teach the diagnosis targets of different types, Schofield also fails to teach that the relationship between the malfunction information and the selected condition of one of the plurality of malfunction-information storing objects is different from that of another one of the plurality of malfunction-information storing objects.

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35. (new) A vehicular control device having a self-diagnosis function for informing occurrence of abnormality in a plurality of diagnosis targets of different types by controlling at least one malfunction indicator light (MIL) in such a manner that operation of said at least one MIL is selected from one of lighting-on, flashing and lighting-off based on a result of a malfunction detection operation of each one of said plurality of diagnosis targets, said vehicular control device comprising an object oriented self-diagnosis program stored therein for implementing said self-diagnosis function, said object oriented self-diagnosis program including:

a plurality of malfunction-information storing objects, each of which is provided to a corresponding one of said plurality of diagnosis targets and specifies a control instruction for instructing a control operation of said at least one MIL to be a selected condition with respect to malfunction information of said corresponding one of said plurality of diagnosis targets based on said malfunction information of said corresponding one of said plurality of diagnosis targets, said selected condition being one of the following possible conditions: lighting-on, flashing and lighting-off, a relationship between said malfunction information and said selected condition of one of said plurality of malfunction-information storing objects being different from that of another one of said plurality of malfunction-information storing objects, and said malfunction information of said each one of said plurality of diagnosis targets being determined based on said result of said



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malfunction detection operation of said each one of said plurality of diagnosis targets in view of a level of malfunction of said each one of said plurality of diagnosis targets; and

a malfunction-information managing object that carries out adjustment of said control instruction of said at least one MIL specified by said at least one malfunction-information storing object based on said malfunction information of said each one of said plurality of diagnosis target and outputs MIL information for controlling said at least one MIL based on a result of said adjustment of said control instruction of said at least one MIL.